ATTACHMENT J2

Fort Hood Natural Gas Distribution System

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J2.1 Fort Hood Overview

Fort Hood is located in central Texas, approximately 65 miles north of Austin and approximately 20 miles west of Interstate Highway 35 along U.S. Highway 190. The Post covers approximately 339 square miles, straddling Coryell and Bell counties and abutted to the east by the City of Killeen, Texas and to the west by the City of Copperas Cove, Texas.

Fort Hood consists of the five major areas: Main Cantonment area, West Fort Hood, North Fort Hood, maneuver and live-training areas (the Ranges), and the Belton Lake Outdoor Recreation Area (BLORA). The Main Cantonment area represents the original site for South Camp Hood. The site was originally selected in 1941 and construction started 1942. South Camp Hood was designated as Fort Hood in 1951.

Construction of North Camp Hood, which is now known as North Fort Hood, started shortly thereafter. North Fort Hood is located approximately 17 miles to the north of the Main Cantonment area. Approximately 244 square miles of land between North Fort Hood and the Main Cantonment area is used for maneuvers and live fire exercises. Fort Hood has two active airfields: Hood Army Airfield and Robert Gray Airfield. Hood Army Airfield is located on the eastern edge of the Cantonment area and Robert Gray Airfield is located on West Fort Hood. BLORA is located on the eastern-most portion of Fort Hood.

Fort Hood's primary mission is to prepare both active and reserve military components for deployment and execution of military and domestic missions worldwide. The Post is distinctive in that it is the only military installation in the United States capable of stationing and training two armored divisions. A major element of Fort Hood's mission is derived from its extensive training areas. The maneuver and training areas within the Ranges are used to simulate battlefield conditions and support infantry, armor, artillery, and air training operations.

Fort Hood has privatized the military family housing villages on the Post. The exception is Liberty Village (300), which is leased housing.

The Villages of Montague, Comanche I, Comanche II, Comanche III, Kouma, Pershing, Venable, McNair, Chaffee, Wainwright, Patton, and Walker were privatized on 1 October 2001 and were transferred to a limited partnership, Fort Hood Family Housing (FHFH). FHFH is renovating existing housing units, constructing 974 new housing units, and demolishing approximately 368 existing housing units over the first 5 years of the 50-year base contract period.

As of 1 December 2003, new construction has been completed on Comanche II Infill (36 units); Kouma 2a, 2b, 2c (224 units); Montague 3 (146 units); and Comanche 3a Infill (80 units). Construction is ongoing in Comanche 4 (326 units). The approved final construction plans for Montague 4 (80 units) and Comanche 5 (16 units) are expected to be awarded before 31 January 2004.

Six units have been demolished and an additional 26 units will be demolished as a part of the Comanche 5 project. The 336 units in Walker Village are expected to be demolished in the 2005-2006 timeframe.

All Star Maintenance maintains the privatized housing for FHFH. Actus-Lend Lease is the design and construction contractor (new houses, renovations, and demolition) for FHFH. The FHFH Partnership (includes Army) owns and depreciates the supporting utility infrastructure that it installs. The Army agreed to operate and maintain this infrastructure. In order to comply with requirements of the FHFH Partnership after utility privatization, the Army has included in this solicitation's scope the requirement to operate and maintain this infrastructure that will continue to be owned by the FHFH Partnership, and shall be titled "Government Retained" property.

J2.2 Natural Gas Distribution System Description

J2.2.1 Natural Gas Distribution System Fixed Equipment Inventory

The Fort Hood natural gas distribution system consists of all appurtenances physically connected to the distribution system between the points of demarcation separating government ownership of the distribution system from the natural gas supplier and separating the distribution system from end-users. The system may include, but is not limited to, regulating stations, pipelines, valves, regulators, and meters. The actual inventory of items sold will be conveyed to the Contractor using the Bill of Sale shown in Attachment J42 to the RFP at the time the system is transferred.

The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The description and inventory were developed based on best available data.

The Offeror shall base its proposal on site inspections, information in the technical library, and other pertinent information, as well as the following description and inventory. If after award the Offeror identifies additional inventory not listed in Paragraph J2.2.1.4, the Offeror may submit to the Contracting Officer a request for an equitable adjustment. If the Offeror determines that the inventory listed in Paragraph J2.2.1.4 is overstated, the Offeror shall report the extent of the overstatement to the Contracting Officer, who will determine an equitable adjustment.

J2.2.1.1 System Description

Fort Hood has an extensive natural gas system serving facilities on the Main Cantonment area and the West and North Fort Hood areas. The system serving North Fort Hood is not connected with the system serving the Main Cantonment area and West Fort Hood. Overall, The system serves approximately 2,400 facilities on the Main Cantonment area, 70 facilities on West Fort Hood, and 200 facilities on North Fort Hood. There are no natural gas pipelines in the BLORA area or the Ranges. Natural gas is primarily used for space and water heating purposes.

ONCOR supplies natural gas to Fort Hood through three pressure regulating and metering stations. Two of the stations are located on Fort Hood's Main Cantonment area and one is located on North Fort Hood. The three stations are owned by ONCOR. The beginning point

of demarcation where ownership changes to Fort Hood is at the down stream side of the last service valve prior to where the piping goes back underground. The station at North Fort Hood and the station located near Highway 190 and Clear Creek Road on the Main Cantonment area have two separate meters and therefore two separate points of demarcation at each gate station.

Specifically excluded from privatization of the natural gas distribution system are:

- Ownership of the mains, service laterals and appurtenances in housing areas defined as Comanche II Infill, Comanche 3a, Comanche 4, Comanche 5, Kouma 2 a&b, Kouma 2c, Montague 3, and Montague 4. The utility infrastructure in these housing areas is retained by the government and not included with the utility system being conveyed.

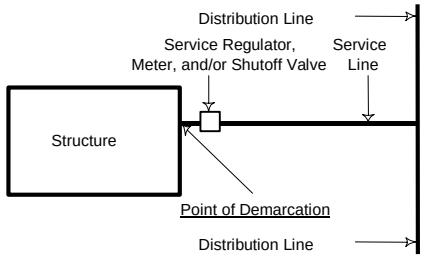
J2.2.1.2 Points of Demarcation

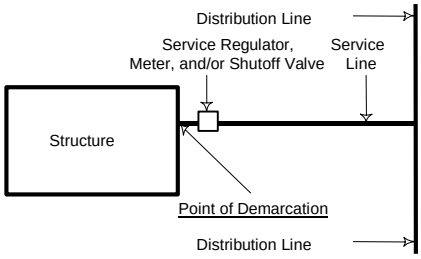
The natural gas distribution system consists of all components from the point where Fort Hood takes ownership from the supplier to the point where natural gas is delivered to end-users. The point of demarcation for each end-user is defined as the point or component on the distribution system where ownership changes from the utility owner to the building owner. In most cases the point of demarcation is the last component or fitting (i.e., meter, valve, regulator, elbow, union, etc.) before the service line enters the structure, outside of the facility footprint.

The beginning point of demarcation where ownership changes to Fort Hood is at the down stream side of the last service valve prior to where the piping goes back underground. The station at North Fort Hood and the station located near Highway 190 and Clear Creek Road on the Main Cantonment area have two separate meters and therefore two separate points of demarcation at each gate station.

Table 1 identifies the type of service and general location of the point of demarcation with respect to each building served by the distribution system.

TABLE 1
Natural Gas System Points of Demarcation
Natural Gas Distribution System, Fort Hood, Texas

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the last fitting before the pipe enters the facility, building, or structure.	Non-residential service. One or more fittings are connected to the service line feeding the facility, building or structure.	

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the last fitting before the pipe enters the building/unit. *Note: Point of demarcation for residential service is complimentary to the point of demarcation established by the FHFH initiative. All components of the natural gas distribution system not included as a part of the residence are included with natural gas distribution system included for privatization.*	Residential service.	
Point of demarcation for utility ownership is where FHFH installed infrastructure connects to the existing natural gas distribution main. *Note: Contractor shall provide utility service as defined by the point of demarcation for residential service.*	Residential housing installed by FHFH, Comanche II Infill, Comanche 3a, Comanche 4, Comanche 5, Kouma 2a&b, Kouma 2c, Montague 3, and Montague 4.	See Attachment J for general representations of points of demarcation separating FHFH installed infrastructure and existing natural gas distribution main.
Point of demarcation is where the telephone wires attach to the terminals of the AMR system.	AMR system	None

J2.2.1.3 Condition Assessment

Approximately 90 percent of the natural gas distribution piping at Fort Hood is polyethylene pipe that was installed in the 1970s or later. There is some schedule 40 PVC pipe installed in the Main Cantonment Area and North Fort Hood. This pipe frequently develops leaks. Several components in the Fort Hood natural gas distribution piping have either exceeded or are approaching the end of their useful lives. These include:

- Steel pipe installed in the 1940s, 1950s, and 1960s.
- Valves installed in the 1940s, 1950s, and 1960s.
- Regulators installed in the 1940s, 1950s, 1960s, and 1970s.

Monthly readings on the cathodic protection rectifiers were taken through February 2003. At that time the readings were stopped due to staffing limitations. As sections of steel pipe have been replaced with polyethylene, it is likely that there are "stranded" sections of steel pipe remaining between polyethylene pipe. Because these "stranded" sections are electrically insulated from the other steel pipe, they are no longer protected by the existing cathodic protections system.

There is a supervisory control and data acquisition system (SCADA) associated with the natural gas system; however, it is not operational and has not been maintained. Only the

components of the SCADA that are connected to the natural gas system components are included with the system. The SCADA computer is not included with the system.

J2.2.1.4 Inventory

There are 9 pressure-reducing regulator stations on the natural gas utility system between the ONCOR pressure regulating and metering gate stations and the end users on Post. **Table 2A** shows the regulator stations, their status, and approximate year of construction.

Natural gas is distributed through approximately 230 miles of buried piping ranging in size from 0.5-inch service lines to 10-inch main lines. The average burial depth for buried infrastructure is 2 to 3 feet below ground surface. Approximately 25 percent of the distribution system is underneath parking lots, pavements, roadways, etc. **Table 2B** provides an inventory of the natural gas distribution system piping being privatized.

The approximate year of construction for distribution mains were based on the oldest age of facilities served on a particular distribution line or loop, and then adjusted based on a review of the drawings with utility shop personnel to account for system replacements and new construction. The approximate year of construction was then adjusted to a mid-decade convention, e.g., components constructed in the 1970s were shown in the inventory as 1975. Components installed since 2000 were shown in the inventory as 2000.

The natural gas distribution system also includes other system components such as isolation valves, service regulators, anodeless risers, cathodic protection systems, and natural gas metering devices. Anodeless risers attached to the natural gas system are included with the system; however, they are not specifically listed in the inventory. Gas cock valves used to isolate meters or service regulators are also included with the system but are also not specifically listed in the inventory since they are considered ancillary items. **Table 2C** provides an inventory of other natural gas distribution system components, including valves, service regulators, and meters. **Table 2D** lists the cathodic protection systems included with the natural gas system.

The components of the natural gas system that are being retained by the government are shown in **Table 2E**. This infrastructure represents the mains, services and appurtenances in Comanche II Infill, Comanche 3a, Comanche 4, Comanche 5, Kouma 2 a&b, Kouma 2c, Montague 3, and Montague 4, and will not be conveyed with the utility system being privatized; however, the Contractor shall provide utility services for this infrastructure in accordance with Section C of the service contract and this utility specific J Attachment.

When not specifically identified by system drawings, the size and type of system components were estimated, generally based on the size of the piping the component was connected to. Additionally, when the year of construction was not known, it was estimated based on the age of the piping (for system valves) or the age of the facility served (for isolation valves and service regulators). Facility ages were based on the Fort Hood Real Property report. Meters were estimated based on meter lists. AMR meters are meters currently connected to and being read by the Fort Hood automated meter reading system. AMR meters include the meter and meter interface unit (MIU). Non-AMR meters are currently being read manually and are not connected to the AMR system. Other meters are meters that were previously read, based on the FY 1993 meter books, but are not being tracked currently as AMR or Non-AMR meters.

TABLE 2A
Fixed Inventory, Natural Gas System Regulator Stations
Natural Gas Distribution System, Fort Hood, Texas

Station/Record No.	DPW No.	Status	Approximate Year of Construction
RS – 01	12	Active	1995
RS – 02	10	Active	1963
RS – 03	11	Active	1969
RS – 04	9	Active	1994
RS – 05	7	Active	1969
RS – 06	6	Removed, 2002	
RS – 07	4	Removed, 2002	
RS – 08	3	Removed, 2002	
RS – 09	5	Removed, 2002	
RS – 10	2	Active	1976
RS – 11	1	Active	1976
RS – 12	8	Active	1999
RS – 13	N/A	Active, meets code	2003

Note: The Station/Record No. is the number assigned in the UPC study. The DPW No. is a numbering scheme tracked by the DPW utility shop.

TABLE 2B
Fixed Inventory, Natural Gas Distribution Piping
Natural Gas Distribution System, Fort Hood, Texas

		Approximate Year of Construction (quantity is LF)							
Component	Size	1945	1955	1965	1975	1985	1995	2000	Total
CI Pipe	10 in.				402				402
PE Pipe	0.5 in.					244			244
PE Pipe	0.75 in.				22,939	1,659	8,291	493	33,382
PE Pipe	1 in.				5,831	13,136	79,228	53,079	151,274
PE Pipe	1.25 in.				17,676	19,735	86,219	3,060	126,690
PE Pipe	1.5 in.				625	10,145	13,737	16,284	40,791
PE Pipe	2 in.				7,504	42,665	159,745	34,522	244,436

		Approximate Year of Construction (quantity is LF)							
Component	**Size**	**1945**	**1955**	**1965**	**1975**	**1985**	**1995**	**2000**	**Total**
PE Pipe	2.5 in.					260	1,519		1,779
PE Pipe	3 in.				15,664	19,435	47,320	12,571	94,990
PE Pipe	4 in.				5,827	80,769	121,833	30,951	239,380
PE Pipe	6 in.				3,495	12,566	24,529	1,150	41,740
PE Pipe	8 in.				975	25,988	8,338	5,978	41,279
PE Pipe	10 in.				646	1,097	4,525		6,268
PE Pipe Total		-	-	-	81,182	227,699	555,284	158,088	1,022,253
PVC Pipe	1 in.				1,754	112		57	1,923
PVC Pipe	1.25 in.				1,418		118		1,536
PVC Pipe	1.5 in.				893				893
PVC Pipe	2 in.				777				777
PVC Pipe	2.5 in.				766		117		883
PVC Pipe	3 in.				421				421
PVC Pipe	4 in.				459		4,625	1,029	6,113
PVC Pipe	6 in.				429		908		1,337
PVC Pipe	10 in.				965				965
PVC Pipe Total		-	-	-	7,882	112	5,768	1,086	14,848
STEEL Pipe	0.75 in.					57			57
STEEL Pipe	1 in.		2,114	2,555	131	407	432		5,639
STEEL Pipe	1.25 in.	185	1,791	1,210		5,579	80		8,845
STEEL Pipe	1.5 in.		1,031	4,369	103	1,828	917		8,248
STEEL Pipe	2 in.	736	5,804	2,447		7,390	779	30	17,186
STEEL Pipe	2.5 in.			638					638
STEEL Pipe	3 in.		895	559	455				1,909
STEEL Pipe	4 in.		5,210	25,295	399	6,806	17,781		55,491
STEEL Pipe	6 in.		43	112					155
STEEL Pipe	8 in.		243	69	926	653			1,891
STEEL Pipe Total		921	17,131	37,254	2,014	22,720	19,989	30	100,059
Pipe Total		921	17,131	37,254	91,480	250,531	581,041	159,204	1,137,562

		Approximate Year of Construction (quantity is LF)							
Component	**Size**	**1945**	**1955**	**1965**	**1975**	**1985**	**1995**	**2000**	**Total**

Notes:
LF = linear feet
CI = cast iron
PE = polyethylene
PVC = polyvinyl chloride

TABLE 2C
Fixed Inventory, Natural Gas Service Regulators and Valves
Natural Gas Distribution System, Fort Hood, Texas

		Approximate Year of Construction (quantity is EA)							
Component	**Size**	**1945**	**1955**	**1965**	**1975**	**1985**	**1995**	**2000**	**Total**
Regulator	0.5 in.					1			1
Regulator	0.75 in.			4	440	8	140	14	606
Regulator	1 in.	22	27	164	46	75	1,401	814	2,549
Regulator	1.25 in.	4	27	57	36	124	848	1	1,097
Regulator	1.5 in.		7	20	5	21	26	1	80
Regulator	2 in.	2	6	24	12	31	34	2	111
Regulator	2.5 in.	1				2			3
Regulator	3 in.			1	2	2	11		16
Regulator	4 in.			5	1	7	5		18
Regulator	8 in.						2		2
Regulator Total		29	67	275	542	271	2,467	832	4,483
Valve, Ball	0.5 in.					1			1
Valve, Ball	0.75 in.				2	3	141		146
Valve, Ball	1 in.	22	15	158	30	50	428	550	1,253
Valve, Ball	1.25 in.	7	22	39	15	55	249	4	391
Valve, Ball	1.5 in.	7	5	17	5	31	39	10	114
Valve, Ball	2 in.	4	21	16		13	1	10	65
Valve, Ball	2.5 in.	4		2					6
Valve, Ball	3 in.	1	6	1	8		5	2	23
Valve, Ball	4 in.		22	4	4	18	11	10	69
Valve, Ball	6 in.		1	1	3		3		8
Valve, Ball	8 in.		3			7		1	11

		Approximate Year of Construction (quantity is EA)							
Component	**Size**	**1945**	**1955**	**1965**	**1975**	**1985**	**1995**	**2000**	**Total**
Valve, Ball	10 in.				1		2		3
Valve, Ball Total		45	95	238	68	178	879	587	2,090
Valve, Plug	2 in.			16	11	63	272	15	377
Valve, Plug	2.5 in.			1		1	1		3
Valve, Plug	3 in.			20	13	17	32	7	89
Valve, Plug	4 in.			10	6	41	164	11	232
Valve, Plug	6 in.			3		12	25		40
Valve, Plug	8 in.			1	4	7	2	4	18
Valve, Plug	10 in.				2	1			3
Valve, Plug Total		-	-	51	36	142	496	37	762
Valve Total		45	95	289	104	320	1,375	624	2,852
Meters, AMR							456	13	469
Meters, NON-AMR						47			47
Meters, Other					43	44			87
Meter Total					43	91	456	13	603

Notes:
AMR = Automatic Meter Reading System
EA = each

TABLE 2D
Fixed Inventory, Natural Gas Cathodic Protection Systems
Natural Gas Distribution System, Fort Hood, Texas

No.	**Adjacent Building**	**Rectifier Manufacturer & Model**	**Rectifier Year Replaced**	**Anodes Year Replaced**	**Notes**
6	39043	Rio ACP	1975	1983	1
9	1	Rio ACP	1975	1983	1, 2
12	4612				4
13	4415	Rio ACP	1975	1980	1
17	16007				4

No.	Adjacent Building	Rectifier Manufacturer & Model	Rectifier Year Replaced	Anodes Year Replaced	Notes
18	210	CTM CA1	1975	1985	1
19	12011				4
22	6790				4
24	9407	Rio ACP	1975	1994	1
25	12005				4
26	6182				4
27	6284				4
28	6549				4
29					4
31	5331				4
32	5268				4
33	5633				4
34	4289				4
35	8412				4
36	9211	Unknown	1995	1983	
37	90016				4
38	6314				4
40	36001	Rio ACP	1975	Original Construction (1945)	1, 3
41	16002				4
42	14008				4
43	12002				4
44	9413				4
45	37005				4
46	50004	Goodall Custom	1980	Original Construction (1945)	
47	52069	Goodall Custom	1980	Original Construction (1945)	
49	60085				4

Notes:
1. Year of rectifier installation estimated.
2. Cathodic protection system installed on power pole guy wire as an experiment.
3. System may not be in use.
4. System not in use.

TABLE 2D
Fixed Inventory, Government Retained Infrastructure
Natural Gas Distribution System, Fort Hood, Texas

		Approximate Year of Construction is 2002		
NAME	**Component**	**Size**	**Units**	**Quantity**
COMANCHE II INFILL	PE Pipe	0.75 in.	LF	904
COMANCHE II INFILL	PE Pipe	1 in.	LF	1,260
COMANCHE II INFILL	PE Pipe	2 in.	LF	1,153
COMANCHE II INFILL	Regulator	0.75 in.	EA	17
COMANCHE II INFILL	Valve, BALL	2 in.	EA	1
COMANCHE II INFILL	Meters, AMR	0.75 in.	EA	36
COMANCHE 3a	PE Pipe	0.75 in.	LF	1,829
COMANCHE 3a	PE Pipe	2 in.	LF	3,576
COMANCHE 3a	Regulator	0.75 in.	EA	37
COMANCHE 3a	Valve, BALL	2 in.	EA	9
COMANCHE 3a	Meters, AMR	0.75 in.	EA	80
COMANCHE 4	PE Pipe	0.75 in.	LF	8,005
COMANCHE 4	PE Pipe	2 in.	LF	6,961
COMANCHE 4	PE Pipe	4 in.	LF	8,867
COMANCHE 4	Regulator	0.75 in.	EA	161
COMANCHE 4	Regulator	2 in.	EA	3
COMANCHE 4	Valve, BALL	2 in.	EA	12
COMANCHE 4	Valve, BALL	4 in.	EA	15
COMANCHE 4	Meters, AMR	0.75 in.	EA	326
COMANCHE 5	PE Pipe	0.75 in.	LF	454
COMANCHE 5	PE Pipe	2 in.	LF	1,197
COMANCHE 5	Regulator	0.75 in.	EA	6
COMANCHE 5	Regulator	2 in.	EA	2
COMANCHE 5	Valve, BALL	0.75 in.	EA	1
COMANCHE 5	Valve, BALL	2 in.	EA	8
COMANCHE 5	Meters, AMR	0.75 in.	EA	16

	Approximate Year of Construction is 2002			
NAME	**Component**	**Size**	**Units**	**Quantity**
KOUMA 2a&b	PE Pipe	0.75 in.	LF	2,736
KOUMA 2a&b	PE Pipe	2 in.	LF	5,589
KOUMA 2a&b	PE Pipe	4 in.	LF	243
KOUMA 2a&b	Regulator	0.75 in.	EA	55
KOUMA 2a&b	Valve, BALL	2 in.	EA	7
KOUMA 2c	PE Pipe	0.75 in.	LF	3,092
KOUMA 2c	PE Pipe	1 in.	LF	3,063
KOUMA 2c	PE Pipe	2 in.	LF	2,155
KOUMA 2c	PE Pipe	4 in.	LF	213
KOUMA 2c	Regulator	0.75 in.	EA	55
KOUMA 2c	Valve, BALL	1 in.	EA	3
KOUMA 2c	Valve, BALL	2 in.	EA	6
KOUMA 2c	Valve, BALL	4 in.	EA	1
KOUMA 2a&b, 2c	Meters, AMR	0.75 in.	EA	224
MONTAGUE 3	PE Pipe	0.75 in.	LF	2,878
MONTAGUE 3	PE Pipe	1 in.	LF	888
MONTAGUE 3	PE Pipe	2 in.	LF	5,081
MONTAGUE 3	PE Pipe	4 in.	LF	2,054
MONTAGUE 3	Regulator	0.75 in.	EA	66
MONTAGUE 3	Valve, BALL	2 in.	EA	8
MONTAGUE 3	Valve, BALL	4 in.	EA	5
MONTAGUE 3	Meters, AMR	0.75 in.	EA	146
MONTAGUE 4	PE Pipe	0.75 in.	LF	1,718
MONTAGUE 4	PE Pipe	2 in.	LF	4,497
MONTAGUE 4	Regulator	0.75 in.	EA	34
MONTAGUE 4	Valve, BALL	2 in.	EA	7
MONTAGUE 4	Meters, AMR	0.75 in.	EA	80

		Approximate Year of Construction is 2002		
NAME	Component	Size	Units	Quantity

Notes:
PE = polyethylene
AMR = Automatic Meter Reading System
EA = each
LF = linear feet

J2.2.2 Natural Gas Distribution System Non-Fixed Equipment and Specialized Tools

Table 3 lists other ancillary equipment (spare parts), and **Table 4** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 3
Spare Parts
Natural Gas Distribution System, Fort Hood, Texas

Qty	Item	Make/Model	Description	Remarks
No spare parts are included with the Fort Hood Natural Gas Distribution System				

TABLE 4
Specialized Vehicles and Tools
Natural Gas Distribution System, Fort Hood, Texas

Qty	Item	Make/Model	Description	Remarks
No Specialized Vehicles or Tools are included with the Fort Hood Natural Gas Distribution System				

J2.2.3 Natural Gas Distribution System Manuals, Drawings, and Records

Table 5 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 5
Manuals, Drawings and Records
Natural Gas Distribution System, Fort Hood, Texas

Qty	Item	Description	Remarks
1	Drawings	CAD Drawings	Hard Copy
1	Electronic	CAD Drawings	Electronic Copy
1	Electronic Database	GIS Database	Electronic Copy
1	Report	Utility Study	Hard Copy

Qty	Item	Description	Remarks
1	DPW digging permit	Form FHT 420-X10, Coordination for Land Excavation	Hard Copy

Note: Manuals, drawings, records, and reports included with the Fort Hood Natural Gas Distribution System are included in the Bidders' Library

J2.3 Specific Service Requirements

The service requirements for the Fort Hood natural gas distribution system are as defined in the Paragraph C, *Description/Specifications/Work Statement*. The following requirements are specific to the Fort Hood natural gas distribution system and are in addition to those found in Paragraph C. If there is a conflict between requirements described below and Paragraph C, the requirements listed below take precedence over those found in Paragraph C.

J2.3.1 Government-retained Utilities Infrastructure

Several new family housing projects are currently under construction or will have begun construction by the time this contract is awarded. The FHFH Partnership, may install additional utilities infrastructure from the existing Fort Hood utility systems to the points of demarcation of these newly constructed housing units (see Paragraph J2.2.1.3 Points of Demarcation).

The Contractor shall separately cost services for the infrastructure to be retained by the Government under CLIN AE, *Fixed Monthly Charge for Government Retained Infrastructure*, see Paragraph B.5.5 (Offerors proposing a Tariff under Schedule B-1) or B.6.5 (Offerors proposing under Schedules B-2, B-3 or B-4), and Paragraph C.2.1.2, *Acquisition of Utility Services for Government Retained Infrastructure*.

J2.3.2 Digging Permits

J2.3.2.1 Contractor-Provided Permits

Contractor shall participate in the Fort Hood Department of Public Works (DPW) digging p

ermit process. The Contractor shall complete the section of form FHT 420-X10, Coordination for Land Excavation, which may impact on the integrity of his Utility Systems and the safety of the requestors and return it to the DPW at building 4612, Fort Hood, Texas for each permit within 3 working days of receipt of the form from DPW. As part of this process, the Contractor shall routinely accept and process digging permit requests from Government work force; military units; FHFH partnership; maintenance, construction, and Army operations contractors; cable and phone maintenance and installation companies; fence rental companies; individual residents, and additional entities as identified by Contracting Officer to have a valid need for a digging permit. Contractor shall identify methodology of accepting, processing, approving, and listing reason(s) for disapproval. Contractor shall be responsible for all repairs, costs, and damages due to excavations by others for which he did not properly mark his utilities as part of the DPW digging permit process.

J2.3.2.2 Fort Hood-Provided Permits

The Contractor shall first obtain digging permits directly from DPW for utilities owned by the Government before any drilling, digging, or excavation is undertaken. The Contractor shall provide a completed form FHT 420-X10, Coordination for Land Excavation, to the DPW building 4612, Fort Hood, Texas for each permit. Allow 14 working days for Government review of digging permit requests. A digging permit for a specified area of excavation expires 30 days after the issue date; Contractor must re-apply for a new permit to perform excavation in the area if the excavation was not started within the 30-day period. Permits will identify all underground utilities within 1,500 mm (5 feet) of the designated area. Contractor shall be responsible for all repairs, costs, and damages due to his excavations that fail to comply with the DPW digging permit process, including excavations extending beyond areas that have been cleared for excavation.

J2.3.3 Inspection and Maintenance Program

J2.3.3.1 Leak Detection

Leak detection surveys shall be performed IAW the Texas Railroad Commission (RRC) and 49 CFR 192 standards and frequencies. Fort Hood has designated 37 facilities as meeting the classification of a business district for the purpose of complying with 49 CFR 192 (See the *Fort Hood UP Gas Business Districts* exhibit in the Technical Library). At a minimum, the Contractor shall consider these facilities as a business district for the purpose of complying with 49 CFR 192. The Government reserves the right to review leak detection records developed and maintained by the Contractor.

J2.3.3.2 Regulator Stations

The Contractor shall develop and implement an inspection and maintenance program for natural gas regulator stations IAW 49 CFR 192. The Government reserves the right to review the Contractor's regulator station maintenance records.

J2.3.3.3 Valve Maintenance

The Contractor shall develop and implement a valve maintenance program IAW 49 CFR 192. For the purposes of complying with 49 CFR 192, the Government has identified 102 key zone valves for Fort Hood (See the Fort Hood UP Gas Key Zone Valves exhibit in the Technical Library). The Contractor shall determine which valves are necessary to control the distribution of natural gas, respond to outages and emergency situations, isolate the system, restore natural gas service, and otherwise as necessary to meet the requirements of this contract. The Government reserves the right to review the Contractor's valve maintenance records.

J2.3.3.4 Cathodic Protection System Maintenance

The Contractor shall own, operate, and maintain the natural gas cathodic protection system for carbon steel piping systems IAW 49 CFR 192. Much of this cathodic protection system is not being maintained and/or is non-functional. The Contractor shall determine what is required and shall implement cathodic protection as necessary to comply with applicable rules and regulations. The Government reserves the right to review the Contractor's cathodic protection system records.

J2.3.4 Supervisory Control and Data Acquisition System

The Supervisory Control and Data Acquisition (SCADA) system in place at Fort Hood has not been maintained and is no longer functioning. The Contractor shall install a SCADA system, or an alternate data capturing system approved by the Contracting Officer, that he shall own, operate, and maintain.

The Contractor shall determine the type, extent, and requirements of the SCADA system in accordance with applicable standards. The Contractor shall provide the Government access to the SCADA system for monitoring system components on Fort Hood. The Contractor shall coordinate with the Contracting Officer to establish the means for Government access.

At a minimum, the Contractor shall include real time monitoring of the meters at the 9 regulator stations. The Contractor shall provide all labor, equipment and materials necessary to install, maintain, operate, repair, upgrade, or replace the meters used to provide meter information.

J2.3.5 Meters

The Contractor shall operate, maintain, and calibrate all secondary water meters, IAW applicable standards and regulations. The Government reserves the right to review the Contractor's meter and maintenance and calibration records.

J2.3.5.1 Connectivity to the Automated Meter Reading (AMR) System

All new meters and replacement meters installed shall meet Fort Hood's design standards and industry standard requirements for measuring natural gas consumption, and shall be connected to the Fort Hood Automated Meter Reading (AMR) System (see the *Fort Hood Gas Meter Requirements* exhibit in the Technical Library). The Contractor shall test and confirm successful connection and transmission of flow information to Fort Hood's AMR system. The Contractor shall provide all labor, equipment or materials necessary to install, connect, test, and calibrate meters. DPW will make the final connection between the meter sensor and the meter interface unit (MIU) as part of Installation Quality Control.

J2.3.5.2 Meter Reading

Fort Hood currently reads meters manually and with the AMR. The Contractor shall read meters each month as defined in Paragraph J2.5 *Secondary Metering*. Fort Hood will provide the Contractor a list each month of the meters that were not successfully read using the AMR. The Contractor shall also read these meters each month. Historically, approximately 3 percent of the AMR meters fail to be read successfully by the AMR system each month.

The Contractor shall keep meter books with monthly consumption for each meter reading (see FY 2003 Meter Books for an example of information required to be included in the Contractor's Meter Books). Meter books shall include building address or facility number, meter number, previous month readings, current month readings, multipliers for each meter, total monthly consumption, points of contact for meter questions, and procedure for converting meter reads into consumption (including multipliers). The Contractor shall coordinate with the Government to determine the format for meter books to be delivered.

J2.3.6 Fire Control and Safety

The Contractor shall abide by Fort Hood fire protection requirements. The utility system purchased by the Contractor may include facilities. These facilities may or may not include fire alarm systems. Where required by federal, state or local regulation, the Contractor shall maintain the fire alarm system for all facilities owned and operated by the Contractor. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.

J2.3.7 Gate Station Access

Contractor shall maintain joint access with ONCOR and the Government in all gate stations.

J2.3.8 Restricted Access ("Q" Area and Ranges)

The Contractor shall coordinate with and obtain written approval from Fort Hood for entry into the ammo storage facility located on West Fort Hood (known as the “Q” area). Access into the fenced area will require additional security clearance and full time military escort. Contractor shall obtain access to this area at Building 92065.

The Contractor shall coordinate with and obtain written approval from Fort Hood Range Control for any future construction in the areas managed by Range Control. Contractor shall provide 30 day written notice to Range Control prior to performing any routine maintenance, repairs, construction, or other work on the utility system in the Ranges (all areas managed and controlled by Fort Hood Range control). Contractor shall be required to coordinate all work necessary and as directed by Range Control during emergency response situations.

J2.3.9 Crisis Situations

IAW Paragraph C.9.8, *Exercises and Crisis Situations Requiring Utility Support*, the Contractor shall provide support as directed by Fort Hood DPW or equivalent agency for exercises and crisis situations. Contractor shall submit Emergency Response Plans for approval by the Government For all Exercise and Crisis situations IAW C.9.8.

J2.4 Current Service Arrangement

ONCOR supplies gas to Fort Hood at three meter/regulation stations (gate stations). Two gate stations are located on the Main Cantonment area and one is located at North Fort Hood (NFH). The NFH gate station provides gas at 35 pounds per square inch gauge (psig). The Main Cantonment gate stations supply gas at different pressures. The gate station near Hwy 190 near Clear Creek Road supplies gas at 65 psig, and the gate station on the east side of 31st St. supplies gas at 35 psig. Gas pressure is dropped from 35 to 16 psig at 9 subsequent regulator stations. Each building or end use has at least one service regulator to lower the gas pressure for equipment and appliance use (i.e., 7 inches of water to 1 psig).

J2.5 Secondary Metering

Between the point of delivery and the end user points of demarcation, the Contractor shall own the existing meters, with the exception of the FHFH installed meters in Comanche II Infill, Comanche 3a, Comanche 4, Comanche 5, Kouma 2 a&b, Kouma 2c, Montague 3, and Montague 4, and shall install additional meters at new and upgraded locations as directed by the Contracting Officer. Contractor shall install or cause to have installed utility meters as requested by the Contracting Officer to include accessories that will ensure compatibility with the approved data capturing system as approved by the Contracting Officer.

J2.5.1 Existing Meters

Tables 6A, 6B and 6C list the existing (at the time of contract award) meters that will be transferred to the Contractor. Table 6A lists meters connected to the AMR system, Table 6B lists meters that are not connected to the AMR system (Non-AMR meters) and Table 6C lists other meters (meters not connected to the AMR system and not currently being read as non-AMR meters). All of the meters identified as AMR, non-AMR and other meters are included with the system to be privatized.

The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3, *Metering*, J2.3.5.3, *Meter Reading*, and J2.6, *Monthly Submittals*. The Contractor shall provide monthly meter readings for non-AMR meters that are identified as non-reimbursable (Table 6B) and all other meters (Table 6C). AMR meters (Tabled 6A) and non-AMR meters that are identified as reimbursable (Table 6B) will be read by the Government. In the event AMR meters are not able to transmit data to the AMR system, the Contractor shall provide meter readings for AMR meters when requested by the Government.

The Contractor is not required to provide meter readings for the meters identified as government-retained infrastructure (Table 2E).

TABLE 6A
Existing Secondary Meters, Meters Connected to the AMR System
Natural Gas Distribution System, Fort Hood, Texas

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
AAMC0809(P1_135)	80113140		Equimeter-R275	10	4	
AAMC0809(P2_135)						
AAPX0611						
AAPG0708(P?_70003)						
DECP2004(P?_39043)						
G3SM4213(P?_22028)	6117031					
MDOO3112(P?_4905_1)	10858534					
DEFH3050(P4_175_8)	5446574			100	4	1998
DEFH2933(P0_178_4)	2262446			10	7	1998

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
DEFH2901(P3_180_5)						
MDOO3123(P7_420)	5272652			1	7	
MDOO3124(P0_4222)	10871542			100	4	
MDOO6150(P0_4441)	10889331			100	4	
MDOO3110(P0_4902)	10863855			100	4	
MD003112(P0_4905_2)	10858534			100	4	
DEFH4500(P3_5258_1)	5446565			100	4	
DEFH4501(P3_5258_2)	5446573			100	4	
DEFH4502(P3_5658_1)	5446571			100	4	
DEFH4503(P3_5658_2)	5446564			100	4	
DEFH2946(P0_5852)	80105726					
DEFH2204(P3_5886)	5446576			100	4	1999
DEFH2205(P3_5891_1)	5446543			100	4	1999
DEFH2203(P3_5962)	5446553			100	4	1999
DEFH3023(P4_6222)	5446561			100	4	1998
DEFH2919(P0_6443_1)	80114729					
DEFH3025(P4_6447_1)	5446545			100	4	1998
DEFH3026(P4_6447_2)	5446572			100	4	1998
DEFH2921(P7_6449_1)	319226			100	4	
DEFH3024(P4_6450_2)	5446481			100	4	1998
DEFH3022(P0_6522)	5446577			100	4	1998
DEFH2806E1(P3_6608)	79581			100	4	
DEFH2807E1(P3_6610)	79591			100	4	
DEFH2808E1(P3_6734)	79582			100	4	
DEFH2809(P3_6737)	179592			100	4	
DEFH2700(P0_6791)	54533					
DEFH2702(P0_6792)	54595					
DEFH2703(P0_6793)	55555					
DEFH2704(P0_6794)	319223					
DEFH2705						
DEFH2706(P0_6796)	3697499					
DEFH2707(P0_6797)	80114936					
DEFH2708(P0_6798)	4388165					

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
DEFH2709(P0_6799)	3314085					
DEFH2922E1(P0_6809)	319249			100	4	
DEFH2711(P0_6821)	179589					
DEFH2710((P0_6826)	179585					
MDOO3125(P0_7015)	10895847			100	4	
G3SM4203(P7_7019)	5625272					
G3SM4204(P7_22028)	6117031					
G3SM4211(P7_7050_1)	188628					
G3SM4205(P7_7051)	24227					
DEFH2953(P0_8130)	80114669					
DEFH3300(P4_8144)	5446569			100	4	1998
DEFH3301(P4_8145)	5446579			100	4	1998
DEFH2962(P0_8402)	80103721					
DEFH3302(P4_8415_1)	5446552			100	4	1998
DEFH3303(P4_8415_2)	5446563			100	4	1998
MDOO3134P7_9440)	020304				7	
G3SM4206(P7_19030)	5291417					
G3SM4207(P0_19031)	8818028					
G3SM4208(P7_19032)	195730					
G3SM4209(P7_22012)	55008833					
G3SM4201(P7_22027)	2936754					
DECP2002(P7_29005)	5680350					
MDOO3102(P0_33001)	6873841			100	4	
MDOO3106(P7_33003)	212445					
MDOO3143(P0_36000)				120	5	1999
MDOO3121(P7_36001)	6405715			1	7	
MDOO3104(P7_36014)	106776			1	7	
MDOO3116(P0_36017)	10858420			100	4	
MDOO3117(P0_36019)	10876167			100	4	
MDOO3131(P0_39033)	10856678			100	4	
DEFH3002(P0_48556_1)	3155384					
DEFH3003(P0_48556_2)	3155393					
DEFH3004(P0_48558_1)	3155385					

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
DEFH3005(P0_48558_2)	3155392					
DEFH3006(P0_48560_1)	3155394					
DEFH3007(P0_48560_2)						
DEFH3009(P0_48562_2)	3155382					
DEFH3014(P0_48563_1)	3155664					
DEFH3015(P0_48563_2)	3155388					
DEFH3010(P0_48564_1)	3155391					
DEFH3011(P0_48564_2)	3155383					
AAPX0930(P7_50004)	2936900					
AAPZ1333(P0_50008)	80113600					
DEFH3027(P4_51224_1)	5502572			100	4	1998
DEFH2935G1(P0_51322_2)				100	4	1998
DEFH2907(P3_51452_1)	692819			100	4	
DEFH2957(P0_51550)	80114514					
DEFH2911(P3_51609)	5502574			100	4	
DEFH2941(P0_51636)	80113760					
DEFH2942(P0_51733_2)	692813			100	4	1998
DEFH2943(P0_51733_6)	5502571			100	4	1998
DEFH2912(P3_51764)	688020			100	4	
DEFH3028(P4_52134_2)	5446557			100	4	1998
DEFH3030(P4_52205_2)	5446544			100	4	1998
DEFH3029(P4_52207_2)	5446578			100	4	1998
DEFH3032(P4_52210_1)	5446542			100	4	
DEFH3031(P4_52211_1)	5446562			100	4	1998
DEFH2504(P0_60004_1)	5446549			100	4	1998
DEFH2505(P0_60004_2)	5446560			100	4	1998
DEFH2502(P0_60010_1)	5446540			100	4	1998
DEFH2503(P0_60010_2)	5446566			100	4	1998
DEFH2500(P0_60100_1)						
DEFH2501(P0_60100_2)	13795582					
MDOO3108(P0_76022_1)	10856045		Equimeter 415	100	4	
DEFH4109(P0_6222)	5446561					
DEFH4110(P0_6447_1)	5446545					

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
DEFH4111(P0_6447_2)	5446572					
DEFH4112(P0_6449_1)	319226					
DEFH4112(P0_6449_1)	5446481					
DEFH4114(P0_6522)	80113605					
DEFH4115(P0_6540_1)						
DEFH4116(P0_6540_1)						
DEFH4117(P0_6541_1)						
DEFH4118(P0_6541_2)						
DEFH4119(P0_6542)						
DEFH4120(P0_6544_1)						
DEFH4121(P0_6544_1)						
DEFH4122(P0_6553)						
DEFH4123(P0_6560)						
DEFH4124(P0_6565)						
DEFH4126(P0_6566_2)						
DEFH4127(P0_6570_1)						
DEFH4128(P0_6570_2)						
defh5828(P_84215_1)	13883284	8566056	Invensys	100	4	
defh5829(P0_84215_2)	13836149	8566046	Invensys	100	4	
defh5830(P0_84236_1)	13886536	8566052	Invensys	100	4	
defh5831(P0_84236_2)	13882909	8566062	Invensys	100	4	
defh5832(P0_84241_1)	13854737	8566061	Invensys	100	4	
defh5833(P0_84241_2)	13802978	8566063	Invensys	100	4	
defh5834(P0_84110_2)	13808238	8566105	Invensys	100	4	
defh5835(P0_84121)	13809799					
defh5836(P0_84125)	13878407					
defh5837(P0_84131)	13892816	8566037	Invensys	100	4	
defh5838(P0_84249)	13808207					
defh5839(P0_84250_2)	13897792					
defh5840(P0_84251_2)	13810482	8566045	Invensys	100	4	
defh3033(P0_6608)	N179581		American	1	4	
defh3034(P0_6610)	N179591		American	1	4	
defh3035(P0_6734)	N179582		American	1	4	

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
defh3036(P0_6735)	14148223	8726052	Invensys	100	4	
defh3037(P0_6737)	N179592		American	1	4	
defh3039(P0_6813)	14096365	8726103	Invensys	100	4	
defh3040(P0_6822)	14152491	8726059	Invensys	100	4	
defh3042(P0_6831)	14136196	8726106	Invensys	100	4	
defh3043(P0_6851)	1406474	8726096	Invensys	100	4	
defh5500(P0_150_1)	13874869	8566083	Invensys	100	4	
defh5501(P0_150_8)	13784880	8566081	Invensys	100	4	
defh5504(P0_160_1)	13888887	8566057	Invensys	100	4	
defh5505(P0_160_8)	13809679	8566073	Invensys	100	4	
defh5506(P0_164_1)	13834576	8566071	Invensys	100	4	
defh5507(P0_164_8)	13809795	8566072	Invensys	100	4	
defh5508(P0_165_1)	13798604	8566084	Invensys	100	4	
defh5509(P0_165_8)	13667047	8566076	Invensys	100	4	
defh5510(P0_166_1)	13883820	8566100	Invensys	100	4	
defh5511(P0_166_8)	13886233	8566033	Invensys	100	4	
defh5512(P0_167_1)	13809227	8566044	Invensys	100	4	
defh5513(P0_167_8)	13784882	8566058	Invensys	100	4	
defh5514(P0_168_1)	13886713	8566092	Invensys	100	4	
defh5515(P0_168_8)	13888548	8566114	Invensys	100	4	
defh5523(P0_183_1)	13809360	8566028	Invensys	100	4	
defh5524(P0_183_8)	13637756	8566027	Invensys	100	4	
defh5525(P0_184_1)	13821970	8566026	Invensys	100	4	
defh5526(P0_184_8)	13807951	8566086	Invensys	100	4	
defh5800(P0_71007)	13753379	8566145	Invensys	100	4	
defh5801(P0_71014)	13575527	8566143	Invensys	100		
defh5802(P0_72013_1)	13619520	8566010	Invensys	100	4	
defh5803(P0_72013_2)	13896543	8566021	Invensys	100	4	
defh5804(P0_76006)	13801509	8566023	Invensys	100	4	
defh5805(P0_76008)	13920767	8566014	Invensys	100	4	
defh5806(P0_76014)	13886543	8566025	Invensys	100		
defh5807(P0_77006)	13821969	8566006	Invensys	100	4	
defh5808(P0_77009_1)	13809229	8566038	Invensys	100	4	

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
defh5809(P0_77009_2)	13798572	8566039	Invensys	100	4	
defh5810(P0_77010_1)	13808206	8566019	Invensys	100	4	
defh5811(P0_77010_2)	13779127					
defh5812(P0_77018_1)	13884978	8566032	Invensys	100	4	
defh5813(P0_77018_2)	13834577	8566033	Invensys	100	4	
defh5814(P0_80004_1)	13728349	8566078	Invensys	100	4	
defh5815(P0_80004_2)	13808113	8566007	Invensys	100	4	
defh5816(P0_80010_1)	13800008	8566020	Invensys	100	4	
defh5817(P0_80010_2)	13620164	8566024	Invensys	100	4	
defh5818(P0_81007_1)	13892818	8566013	Invensys	100	4	
defh5819(P0_81007_2)	13883818	8565828	Invensys	100	4	
defh5820(P0_81008_1)	13821968	8566008	Invensys	100	4	
defh5821(P0_81008_2)	13890854	8566009	Invensys	100	4	
defh5822(P0_81009_1)	13820760	8566015	Invensys	100	4	
defh5823(P0_81009_2)	13886232					
defh5824(P0_81010_1)	13887251	8566041	Invensys	100	4	
defh5825(P0_81010_2)	13809798	8566036	Invensys	100	4	
DEFH2700(P0_60006_1)	13810485	8565911	Envensys	100	4	
DEFH2701(P0_60006_2)	13870487	8565923	Envensys	100	4	
DEFH2702(P0_60009_1)	13809797	8565903	Envensys	100	4	
DEFH2703(P0_60009_2)	13575073	8565909	Envensys	100	4	
DEFH2704(P0_60033_1)	13810483	8565916	Envensys	100	4	
DEFH2705(P0_60033_2)	13810558	8565901	Envensys	100	4	
DEFH2706(P0_60046_1)	13892422	8565939	Envensys	100	4	
DEFH2707(P0_60046_2)	13884393	8565908	Envensys	100	4	
DEFH2708(P0_60048_1)	13778219	8565921	Envensys	100	4	
DEFH2709(P0_60048_2)	13885405	8565945	Envensys	100	4	
DEFH2710(P0_60062_1)	13856829	8565937	Envensys	100	4	
DEFH2711(P0_60062_2)	13784885	8565932	Envensys	100	4	
DEFH2712(P0_60073_1)	13675455	8565928	Envensys	100	4	
DEFH2713(P0_60073_2)	13885967	8565938	Envensys	100	4	
DEFH2714(P0_60100_1)	13874868	8565978	Envensys	100	4	
DEFH2715(P0_60101_1)	13075223	8049552	Envensys	100	4	

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
DEFH2716(P0_60103_1)	13271252	8049533	Envensys	100	4	
DEFH2717(P0_60105_1)	13271607	8049556	Envensys	100	4	
DEFH2718(P0_60107_1)	13443802	8049543	Envensys	100	4	
DEFH2719(P0_60091_1)	13896671	8565929	Envensys	100	4	
DEFH2720(P0_60091_2)	13886323	8565927	Envensys	100	4	
DEFH2721(P0_60093_1)	13749428	8565962	Envensys	100	4	
DEFH2733(P0_60107_2)	13097914	5446519	Envensys	100	4	
DEFH2734(P0_60103_2)	13558715	5446499	Envensys	100	4	
DEFH2735(P0_60105_2)	13446361	5446487	Envensys	100	4	
DEFH2736(P0_60101_2)	13530676	5446493	Envensys	100	4	
DEFH2737(P0_60100_2)	13795582	8565961	Envensys	100	4	
DEFH2722(P0_60093_2)	13882911	8565930	Envensys	100	4	
DEFH2723(P0_60095_1)	13821921	8565948	Envensys	100	4	
DEFH2724(P0_60095_2)	13633786	8565957	Envensys	100	4	
DEFH2725(P0_60090_1)	13821971	8565941	Envensys	100	4	
DEFH2726(P0_60090_2)	13808237	8565933	Envensys	100	4	
DEFH2727(P0_60092_1)	13861458	8565949	Envensys	100	4	
DEFH2728(P0_60092_2)	13809225	8565950	Envensys	100	4	
DEFH2729(P0_60094_1)	13824554	8565959	Envensys	100	4	
DEFH2730(P0_60094_2)	13895703	8565980	Envensys	100	4	
DEFH2731(P0_60096_1)	13895587	8565979	Envensys	100	4	
DEFH2732(P0_60096_2)	13887248	8565963	Envensys	100	4	
DEFH0001(P0_51100)	13778583	8565860	Invensys	100	4	
DEFH0002(P0_51105)	13882810	8565998	S/E	100	4	
DEFH0003(P0_51120)	13619521	8565991	S/E	100	4	
DEFH0004(P0_51132)	13892817	8566004	S/E	100	4	
DEFH0005(P0_51139)	13896139	8565893	S/E	100	4	
DEFH0007(P0_51149)	13784032	8565852	Invensys	100	4	
DEFH0008(P0_51151)	13892822	8565844	S/E	10	4	
DEFH0011(P0_51212)	13878230	8565854	S/E	100	4	
DEFH0012(P0_51213_1)	13809363	8565855	Invensys	100	4	
DEFH0013(P0_51214)						
DEFH0014(P0_51215)						

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
DEFH0017(P0_51222)	13896763	8565838	S/E	100	4	
DEFH0034(P0_51223_2)	13874265	8565847	Inversys	100	4	
DEFH0032(P0_51341)	13867980	8565849	Inversys	100	4	
DEFH0033(P0_51342)	13886324	8565884	S/E	100	4	
defh1400(P0_52022)	13821802	8566002	Invensys	100	4	
defh1407(P0_52107_1)	13629945	8565846	Invensys	100	4	
defh1408(P0_52120_1)	13892378	8565874	Invensys	100	4	
defh1409(P0_52132_1)	13895090	8565876	Invensys	100	4	
defh1411(P0_52123_1)	13836147	8565881	Invensys	100	4	
defh1413(P0_52137_1)	13893521	8565868	Invensys	100	4	
defh1417(P0_52211_1)		5446562	Equimeter	100	4	
defh1500(P0_52211_2)				100	4	
defh1418(P0_52212)	13805602	8566144	Invensys	100	4	
defh1419(P0_52213)	13808266	8566060	Invensys	100	4	
defh1420(P0_52214)	13784404	8565918	Invensys	100	4	
defh1421(P0_52215)	13810146	8566029	Invensys	100	4	
defh1422(P0_52221)	13620167	8565863	Invensys	100	4	
defh1423(P0_52305)	13896762	8566006	Invensys	100	4	
defh1424(P0_52310)	13822733	8565986	Invensys	100	4	
defh1425(P0_52316)	13892893	856590	Invensys	100	4	
defh1426(P0_52321)	13856830	8565869	Invensys	100	4	
defh1427(P0_52334)	13802053	8565998	Invensys	100	4	
defh1428(P0_52341)	13854075	8565858	Invensys	100	4	
defh1429(P0_52401)	13896566	8565864	Invensys	100	4	
defh1430(P0_52424)	13859397	8565865	Invensys	100	4	
defh1431(P0_52427)	13895088	8565857	Invensys	100	4	
defh1432(P0_52431)	13822492	8565848	Invensys	100	4	
defh1433(P0_52434)	13878231	8565853	Invensys	100	4	
defh1434(P0_52437)	13882820	8565861	Invensys	100	4	
defh1425(P0_52466)	13883139	856585	Invensys	100	4	
defh1430(P0_52635)	13753459	8565862	Invensys	100	4	
defh1431(P0_52651)	13854788	8565859	Invensys	100	4	
defh1432(P0_52702)	13771878	8565882	Invensys	100	4	

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
defh1433(P0_52735)	13810149	8565872	Invensys	100	4	
defh1434(P0_52746)	13665135	8565866	Invensys	100	4	
defh1436(P0_52750)	13893526	8565877	Invensys	100	4	
defh1437(P0_52751)	13784887					
defh1438(P0_52752)	13854079					
DEFH3200(P0_48501_1)	13854079	8565831	S/E	100	4	
DEFH3201(P0_48501_2)	13878487	8565828	S/E	100	4	
DEFH3202(P0_48509_1)	13897795	8565835	Invensys	100	4	
DEFH3203(P0_48509_2)	13866620	8565840	Invensys	100	4	
DEFH3204(P0_48521_1)	13884046	8565841	Invensys	100	4	
DEFH3205(P0_48521_2)	13888883	8565833	Invensys	100	4	
DEFH3206(P0_48543_1)	13866619	8565842	S/E	100	4	
DEFH3207(P0_48543_2)	13821972	8565837	S/E	100	4	
DEFH3208(P0_48557_1)	13620161	8565836	S/E	100	4	
DEFH3209(P0_48557_2)	13808001	8565832	S/E	100	4	
DEFH3210(P0_48559_1)	13743632	8566016	Invensys	100	4	
DEFH3211(P0_48559_2)	13822491	8565827	Invensys	100	4	
DEFH3212(P0_48560_1)	3155394		Equimeter	100	4	
DEFH3213(P0_48560_2)	13879485					
DEFH3214(P0_48561_1)	13879585	8566018	S/E	100	4	
DEFH3215(P0_48561_2)	13802149	8565839	S/E	100	4	
DEFH3216(P0_48562_2)	13896765	8565826	S/E	100	4	
DEFH3217(P0_48565_1)	13797092	8566012	Invensys	100	4	
DEFH3218(P0_48565_2)	13884041	8565834	Invensys	100	4	
DEFH3222(P0_48582)	13866618					
DEFH3223(P0_48596)	13820762					
DEFH3224(P0_48614_1)	13820762	8565886	S/E	100	4	
DEFH3225(P0_48614_2)	13866618	8566104	S/E	100	4	
DEFH3226(P0_48619)	13649911					
DEFH3227(P0_48632_1)	13649911	8565887	Invensys	100	4	
DEFH3228(P0_48632_2)	13836325	8566123	Invensys	100	4	
DEFH3229(P0_48653_1)	13858811	8565914	Invensys	100	4	
DEFH3230(P0_48653_2)	13884980	13798573	Invensys	100	4	

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
DEFH3231(P0_48661_1)	13825654					
DEFH3232(P0_48661_2)	13825654					
DEFH3233(P0_48704_1)	13825654	8566139	S/E	100	4	
DEFH3234(P0_48704_2)	13888823	8566142	S/E	100	4	
DEFH3235(P0_48707_1)	13878229	8565098	Invensys	100	4	
DEFH3236(P0_48707_2)	13859399	8565892	Invensys	100	4	
defh2426(P0_5712_1)	13883817	8565992	Invensys	100	4	
defh2427(P0_5712_2)	DOG					
defh2428(P0_5723_1)	13807950	8565883	Invensys	100	4	
defh2429(P0_5723_2)	13884040	8565880	Invensys	100	4	
defh2430(P0_5724_1)	13879933	8565867	Invensys	100	4	
defh2431(P0_5724_2)	13809355	8565883	Invensys	100	4	
defh2432(P0_5734_1)	13890258	8565997	Invensys	100	4	
defh2433(P0_5734_2)	13896767	8565870	Invensys	100	4	
defh2434(P0_5736_1)	13896824	8565994	Invensys	100	4	
defh2435(P0_5736_2)	13784919	8566000	Invensys	100	4	
defh2436(P0_5773_1)	13895584	8565987	Invensys	100	4	
defh2437(P0_5773_2)	13897111	8565999	Invensys	100	4	
defh2438(P0_5860_1)	13810554	8565940	Invensys	100	4	
defh2439(P0_5860_2)	13809367	8565989	Invensys	100	4	
defh2440(P0_5868_1)	13780374	8565989	Invensys	100	4	
defh2441(P0_5868_2)	13879487	8565902	Invensys	100	4	
defh2442(P0_5897)	13846056					
defh2443(P0_5901)	13896056	8565944	Invensys	100	4	
defh2444(P0_5903)	13886321	8565996	Invensys	100	4	
defh2445(P0_5905)	13886241	8565907	Invensys	100	4	
defh2446(P0_5906)	DOG					
defh2447(P0_5907)	13896565	8565943	Invensys	100	4	
defh2448(P0_5909)	13802054	8565942	Invensys	100	4	
defh2452(P0_5912_2)						
defh2453(P0_5927)	13884977	8565871	Invensys	100	4	
defh2454(P0_5937)	13784422	8565873	Invensys	100	4	
defh2455(P0_5949)	13675453	8565889	Invensys	100	4	

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
defh3508(P0_8121)	13879934	8565824	Invensys	100	4	
defh3511(P0_8146)	13825653	8565971	Invensys	100	4	
defh3512(P0_8148)	13892895	8565797	Invensys	100	4	
defh3513(P0_8151)	13860296	8565804	Invensys	100	4	
defh3514(P0_8201)	13779115	8565796	Invensys	100	4	
defh3515(P0_8102_1)	13895633	8565808	Invensys	100	4	
defh3516(P0_8102_2)	13674278	8565799	Invensys	100	4	
defh3517(P0_8102_3)	13674278					
defh3521(P0_8128_1)	13834527	8565795	Invensys	100	4	
defh3522(P0_8128_2)	13854566	8565792	Invensys	100	4	
defh3524(P0_8137_1)	13810009	8565820	Invensys	100	4	
defh3525(P0_8137_2)	13825273	8565812	Invensys	100	4	
defh3537(P0_8206)	13575520	8565809	Invensys	100	4	
defh3538(P0_8260)	13874268	8565800	Invensys	100	4	
defh3539(P0_8262)	13779526	8565786	Invensys	100	4	
DEFH3540(P0_8102_1)						
DEFH3033(P0_5208_1)	13897183	8565935	Envensys	100	4	
DEFH3034(P0_5208_2)	13675662	8565947	Envensys	100	4	
DEFH3035(P0_5210_1)	13856831	Dogs				
DEFH3036(P0_5210_2)	13883823	8565817	Envensys	100	4	
DEFH3037(P0_5212_1)	13802147	8565787	Sensus	100	4	
DEFH3038(P0_5212_2)	13887526	8565982	Sensus	100	4	
DEFH3039(P0_5214_1)	13895635	8565791	Envensys	100	4	
DEFH3040(P0_5214_2)	13883636	8565788	Envensys	100	4	
DEFH3041(P0_5216_1)	13856953	8565811	Sensus	100	4	
DEFH3042(P0_5216_2)	13856952	8565793	Sensus	100	4	
DEFH3043(P0_5218_1)	13836148	Dogs				
DEFH3044(P0_5218_2)	13833334	8565821	Sensus	100	4	
DEFH3045(P0_5220_1)	13882811	8565981	Envensys	100	4	
DEFH3046(P0_5220_2)	13878226	856505?	Envensys	100	4	
DEFH3047(P0_5222_1)	13888806	8565966	Envensys	100	4	
DEFH3048(P0_5222_2)	13886322	8565789	Envensys	100	4	
DEFH3049(P0_5224_1)	????	Dogs				

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
DEFH3051(P0_5224_2)	13809228	8565794	Sensus	100	4	
DEFH3052(P0_5226_1)	13897791	8565790	Sensus	100	4	
DEFH3053(P0_5226_2)	13896380	8565967	Envensys	100	4	
DEFH3054(P0_5258_1)		5446565	Equimeter	1000	4	
DEFH3055(P0_5258_2)		5446573	Equimeter	1	4	
DEFH3056(P0_5313_1)	13876097	8565984	Envensys	100	4	
DEFH3057(P0_5313_2)	13809231	8565954	Envensys	100	4	
DEFH3058(P0_5318_1)	13771874	8565958	Envensys	100	4	
DEFH3059(P0_5318_2)	13822488	8565956	Envensys	100	4	
DEFH3060(P0_5320_1)	13867571	8565985	Envensys	100	4	
DEFH3061(P0_5320_2)	13885406	8565983	Envensys	100	4	
DEFH3062(P0_5465_1)	13575615	8565970	S/E	100	4	
DEFH3063(P0_5465_2)	1387777	8565976	S/E	100	4	
DEFH3064(P0_5512_1)	13883821	8565900	S/E	100	4	
DEFH3065(P0_5512_2)	13809364	8565801	Envensys	100	4	
DEFH3066(P0_5515_1)	13837331	8565974	S/E	100	4	
DEFH3067(P0_5515_2)	13809363	8565952	Envensys	100	4	
DEFH3068(P0_5544_1)	13807622	8565955	Envensys	100	4	
DEFH3069(P0_5544_2)	13855628	8565973	Envensys	100	4	
DEFH3070(P0_5546_1)	13804389	8565969	Envensys	100	4	
DEFH3071(P0_5546_2)	13838225	8565946	Envensys	100	4	
DEFH3072(P0_5559_1)	13874113	8565968	Envensys	100	4	
DEFH3072(P0_5559_2)	13866622	8565977	Envensys	100	4	
DEFH3073(P0_5568_1)	13882907	8565965	Envensys	100	4	
DEFH3074(P0_5568_2)	13809672	8565931	Envensys	100	4	
DEFH3075(P0_5607_1)	13896660	8565975	Envensys	100	4	
DEFH3076(P0_5607_2)	13808006	8565951	Envensys	100	4	
DEFH3077(P0_5641_1)	13854474	8565964	Envensys	100	4	
DEFH3078(P0_5641_2)	13810218	8565953	Envensys	100	4	
DEFH3079(P0_5642_1)	13830205	8565934	Envensys	10	4	
DEFH3080(P0_5642_2)	13833335		Envensys	10	4	
DEFH3081(P0_5658_1)		5446571	Equimeter	1	4	
defh0300(P0_51433)	13881395	8566112	Invensys	100	4	

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
defh0301(P0_51434_1)	13892317	8566090	Invensys	100	4	
defh0302(P0_51434_8)	13825652	8565891	Invensys	100	4	
defh0304(P0_51436)	13795580					
defh0308(P0_51440_1)	13877772	8565896	Invensys	100	4	
defh0309(P0_51440_3)	13886855	8565850	Invensys	100	4	
defh0310(P0_51440_5)	13883677	8563923	Invensys	100	4	
defh0312(P0_51442_1)	13798060	8566612	Invensys	100	4	
defh0313(P0_51442_7)	13886854	8566095	Invensys	100	4	
defh0314(P0_51446)	13665749	8566110	Invensys	100	4	
defh0315(P0_51447)	13880788	8565879	Invensys	100	4	
defh0316(P0_51453_1)	13882906	8566103	Invensys	100	4	
defh0317(P0_51549_1)	13810144	8565922	Invensys	100	4	
defh0318(P0_51501_1)	13771872	8566102	Invensys	100	4	
defh0319(P0_51501_3)	13892690	8565899	Invensys	100	4	
defh0320(P0_51501_5)	13881388	8565905	Invensys	100	4	
defh0321(P0_51503_1)	13873343	8566097	Invensys	100	4	
defh0323(P0_51505_1)	13884399	8566101	Invensys	100	4	
defh0324(P0_51505_3)	13751199	8566096	Invensys	100	4	
defh0325(P0_51505_5)	13891285	8565888	Invensys	100	4	
defh0326(P0_51506_2)	13884398	8565904	Invensys	100	4	
defh0327(P0_51506_4)	13810145	8565898	Invensys	100	4	
defh0328(P0_51506_6)	13884398	8565895	Invensys	100	4	
defh0330(P0_51541)	13810552	8565912	Invensys	100	4	
defh0333(P0_51549)	13810144					
defh0336(P0_51607_1)	13637757					
defh0337(P0_51608_1)	13795579	8565856	Invensys	100	4	
defh0338(P0_51607_3)	13897794	8565906	Invensys	100	4	
defh0341(P0_51711_1)	13797090	8565875	Invensys	100	4	
defh0346(P0_51733_4)	13753460	8565843	Invensys	100	4	
defh0348(P0_51736_1)	13838224	8565845	Invensys	100	4	
defh0351(P0_51749_1)	13859398	8565917	Invensys	100	4	
DEFH5704(P3_82206_2)	5446483			100	4	
DEFH5700(P3_83001_1)		5446541	Equimeter	100	4	

UID	AMR-Serial #	Body-Serial #	MODEL	MULT	Dials	Install date
DEFH5701(P0_83001_2)		5446568	Equimeter	100	4	
DEFH5702(P3_83007_2)	5446570			100	4	
DEFH5703(P0_83008_2)	5446575			100	4	
DEFH5705(P0_84138_1)	80113539		Equimeter	100	4	
DEFH5706(P0_84138_2)	80113924		Equimeter	100	4	
DEFH5707(P0_84139_1)	80113722		Equimeter	100	4	
DEFH5708(P0_84139_2)	80113721		Equimeter	100	4	
DEFH5709(P0_84140)	80114211		Equimeter	100	4	
DEFH5710(P0_84141_1)	80113724		Equimeter	100	4	
DEFH5711(P0_84141_2)	80114823		Equimeter	100	4	
DEFH5712(P0_84142_1)	80114210		Equimeter	100	4	
DEFH5713(P0_84142_2)	80113834		Equimeter	100	4	
DEFH5714(P0_84143)	80113926		Equimeter	100	4	
FBOO4003(P7_85006)						
MDOO3127(P0_90043)	10896958			100	4	
MDOO3132(P0-92066_1)	10897570			100	4	
MDOO3133(P0-92066_2)	2000747126			100	4	
FBOO4004(P7_WFBANK)						
MDOO6151(P _36015)	7577849		Equimeter	10	5	2000
DEFH4504(P0_6443-1)	14086512	9106423	Equimeter	100	4	2002
DEFH4506(P0_6012)	14077571	9106418	Equimeter	100	4	2002
DEFH4507(P0_6013)	14175276	9106420	Equimeter	100	4	2002
DEFH4508(P0_6016)	14169441	9106413	Equimeter	100	4	2002
DEFH4509(P0_6017)	14166741	9106424	Equimeter	100	4	2002
DEFH4510(P0_6020)	14077803	9106417	Equimeter	100	4	2002
DEFH4511(P0_6021)	14176952	9106414	Equimeter	100	4	2002
DEFH4512(P0_6024)	14087105	9106425	Equimeter	100	4	2002
DEFH4513(P0_6025)	14081258	9160419	Equimeter	100	4	2002
DEFH4514(P0_6028)	14081142	9106415	Equimeter	100	4	2002
DEFH45159(P0_6282)	14081207	9106422	Equimeter	100	4	2002
DEFH4516(P0_6283)	14080244	9106412	Equimeter	100	4	2002

TABLE 6B
Existing Secondary Meters, Meters NOT Connected to the AMR System
Natural Gas Distribution System, Fort Hood, Texas

BLDG_NO	UID	OWNER	ADDRESS	REIMBURSEABLE (Y/N)
335	AABK0202G1	AAFES Burger King	31st and HQ Ave	YES
224	AAPG0707G1	AAFES Gas Sta, Main	42nd and HQ Ave	YES
4261	AAPM1012G1	AAFES Maint Off	79th and Santa Fe	YES
4262	AAPM1013G1	AAFES Maint Off	79th and Santa Fe	YES
50006	AAPS1223G1	AAFES Package Store	Clear Creek	YES
33012	AAPX0910G1	AAFES 1CD	73rd and Battalion	YES
70001	AAPX0921G1	AAFES Montague PX	Base Rd, Montague	YES
9401	AAPX0948G1	AAFES 2AD	20th and Bn Ave	YES
1002	AAPZ1327G1	AAFES Shoppette	Hood Rd & HQ Ave	YES
8314	AAPZ1331G1	AAFES Launderette	Martin & Central Dr	YES
85001	AAPZ1332G1	AAFES Shoppette	Martin & Central Dr	YES
70012	AAPZ1335G1	AAFES Shoppette	West Ft Hood	YES
33010	AROO0101G1	Army Res Reg Trng Ct	Support Ave & 72nd	YES
85020	DCOO2201G1	Commissary	10th St & Warrior Way	YES
6603	DEFH2801G1	DEH-Hsg (SOQ)	Todd ST (Patton)	NO
6604	DEFH2802G1	DEH-Hsg (SOQ)	Todd ST (Patton)	NO
6605	DEFH2803G1	DEH-Hsg (SOQ)	Todd ST (Patton)	NO
6606	DEFH2804G1	DEH-Hsg (SOQ)	Todd ST (Patton)	NO
6607	DEFH2805G1	DEH-Hsg (SOQ)	Todd ST (Patton)	NO
60062	DEFH2948G1	DEH-Hsg (typ gas)	Hammer Spur(Venable)	NO
51537-3	DEFH2955G1	DEH-Hsg (typ gas)	Coushatta St (Com 2)	NO
76022adj	DEMT2462G1	DEH-Hsg (Montague Gas)	S. dirt rd, Montague	NO
76022adj	DEMT2462G2	DEH-Hsg (Montague Gas New	S. dirt rd, Montague	NO
130adj	DEMT2463G1	DEH-Hsg (Kouma Gas)	Clear Creek	NO
52381	DPCC3507G1	DPCA-Clear creek GC	s side of bldg	YES
113	DPCH1501G1	DPCA-Child Care Ctr	Hood Rd & T-D Blvd	YES
50012	DPCO3624G1	DPCA-Comm Ctr (CC)	Clear creek rd	YES
72002	DPGS0101G1	DPCA-Girl Scout Bldg	Austin Ave(Montague)	YES
4930	DPRC0601G1	DPCA-Rental Center	Clear creek rd	YES

BLDG_NO	UID	OWNER	ADDRESS	REIMBURSEABLE (Y/N)
49010	DPWL2305G1	DPCA Warrior Lanes	BLDG 49010	YES
90089adj	FIOT0502G1	Force Integration	Mohawk Rd	YES
322	FUOO4001G1	FH Mil Credit Union	37th and HQ Ave	YES
330	HLDC0601G1	AAFES D. Clinic 2AD	(35th) and HQ Ave	YES
194	ICNS3809G1	DPCA-Main NCO Club	37th and HQ Ave	YES
70005	ICNW3816G1	DPCA-WFH NCO Club	Base Road, Montague	YES
5764	ICOS3810G1	DPCA-Main Off Club	24th and T-D Ave	YES
9212	ICPI3811G1	DPCA-Patton Inn	20th and Central Ave	YES
42000	ICSD3814G1	DPCA-Sports Dome	75th and Bn Ave	YES
2250	MDOO6104G1	Meddac	HQ Ave	YES
2255	MDOO6152G1	Meddac	HQ and Support Ave	YES
33011	MLPO0226G1	AAFES Popeye's Chick	73rd and Battalion	YES
111	PHPH3001G1	DEH-Hsg (Poxon Hse)	Hood Rd	YES
1937	RGRG3812G1	DPCA-Rod & Gun Club	53rd and North Ave	YES
4313	RIOO0102G1	RCI, Compound		NO
4321	RIOO0104G1	RCI, Compound		NO
332	USOO0101G1	Post Office	(35th) and HQ Ave	YES
225	WGOT0301G1	AAFES Car Wash, Main	42nd and HQ Ave	YES

TABLE 6C
Existing Secondary Meters, Other Meters
Natural Gas Distribution System, Fort Hood, Texas

BLDG. NO.	UID #	OWNER	ADDRESS	LOCATION	MULT
9001	163004	DPCA-Albee lanes	20th and Central Dr.	n svc drive, ne crnr	1
9410	24623	AAFES Snack Bar	19th and Bn Ave	southeast corner	1
9212	459390	DPCA-Patton Inn	20th and Central Ave	east side	100
7011	182516	AAFES Snack Bar	HAAF	se corner	1
10006	1118559	2+2 Barracks	27th and central ave	E of basement	1
10007	1120854	2+2 Barracks	27th and central ave	w of mech rm	1
10016	1594980	GUYCO	Central Dr & 24th	W side of bldg	1
10018	1674288	GUYCO	24th & Central Dr	W. side of bldg.	1

BLDG. NO.	UID #	OWNER	ADDRESS	LOCATION	MULT
10020	1674289	GUYCO	25th & Central Dr	N. side of mech rm	1
10021	1674290	GUYCO	25th & Central Dr	N. side of mech rm	1
14008		AAFES PX Snack Bar	40th and Bn Ave	southeast corner	1
6608	79581	DEH-HSG (SOQ)	Todd St (Patton)		100
6610	79591	DEH-HSG (SOQ)	Todd St (Patton)		100
6734	79582	DEH-HSG (SOQ)	Rose St (Patton)		100
6735	79593	DEH-HSG (SOQ)	Rose St (Patton)		100
6737	79592	DEH-HSG (SOQ)	Rose St (Patton)		100
6753	79577	DEH-HSG (SOQ)	Marshall St (Patton)		100
6794	319223	DEH-HSG (GOQ)	GOQ Circle, Patton	inside porch, cabinet	10
6798	4388165	DEH-HSG (GOQ)	GOQ Circle, Patton	south side	100
6793		DEH-HSG (GOQ)	GOQ Circle, Patton		100
6791	54533	DEH-HSG (GOQ)	GOQ Circle, Patton		100
6792	44595	DEH-HSG (GOQ)	GOQ Circle, Patton		100
6795	79590	DEH-HSG (GOQ)	GOQ Circle, Patton		100
6826	79585	DEH-HSG (GOQ)	Coleman Rd (Patton)		100
6821	79589	DEH-HSG (GOQ)	Coleman Rd (Patton)		100
6809	319249	DEH-HSG (typ gas)	24th & Rose (Patton)	ne corner	10
8130-2	2101354	DEH-HSG (typ gas)	Central Dr (Walker)		100
6001	2101356	DEH-Hsg (typ gas)	Minue Rd (Chaffee)	north side	100
178-4	103640	DEH-Hsg (typ gas)	T-D Ave (McNair)	north side	1
180-5	103641	DEH-Hsg (typ gas)	T-D Ave (McNair)	north side	1
6443-1	319234	DEH-Hsg (typ gas)	32nd St (Chaffee)	behind carpt strg rm	10
6449-1	319226	DEH-Hsg (typ gas)	31st St (Chaffee)	behind carpt strg rm	10
5852	210355	DEH-Hsg (typ gas)	24th & Dupas (Wainwr)	south side	100
5794	215827	DPCA-Anderson GC	Wainwrt Dr & T-D Ave	west side breezeway	1
6606adj		DPCA Youth Ctr	Patton Dr & T-D Ave		1
4658adj	1120796	MEDDAC	70th & Railhead	w fence, incinerator	100
36000	907783	Darnall Hospital	Wratten Drive	n side, e of mech rm	1000
36000	4117984	Darnall Hospital	Wratten Drive	n side, e of mech rm	10
36014	6776	Dentac-Dental Clinic	Wratten Drive	S side by cooling tower	1
136	46556	AAFES PX Concession	Hood Rd and HQ Ave	sw corner	1
135	319239	AAFES Mil Clth/Fd Ct	Hood Rd and HQ Ave	se corner	10

BLDG. NO.	UID #	OWNER	ADDRESS	LOCATION	MULT
135	216284	AAFES Mil Clth/Fd Ct	Hood Rd and HQ Ave	ne corner	1
213	W44399	AAFES Admin	42nd and HQ Ave	east side	100
314	119075	AAFES PX w/MCC	37th and Bn Ave	southwest corner	100
401	453480	AAFES Classroom	31st and Bn Ave	southwest corner	100
76014	79583	DEH-Hsg (SOQ)	Crockett (Montague)		100
76006	79596	DEH-Hsg (SOQ)	Crockett (Montague)		100
76008	79578	DEH-Hsg (SOQ)	Crockett (Montague)		100
76020	1185144	DPCA-WFH O'Club	Crockett (Montague)	west side by ac	100
76022	1684921	MEDDAC -Preventive Med	south side		100
	6047967	Texas Na Guard MATES	s of loading dock	se corner of bldg	1
	53614	Texas Na Guard MATES	s of loading dock	turbine gas meter	1000
56608	1240937	49th Armored dive	US Hwy 36	south side	100
56616	350891	DRC-NFH			10
60100	319241	DEH-Hsg (type gas)	Wainscott (Venable)	north side	10
60062	319233	DEH-Hsg (type gas)	Hammer Spur (Venable)	east side	10
5658	319225	DEH-Hsg (type gas)	Hoover Rd (Pershing)	s side of carport	10
5669	319242	DEH-Hsg (type gas)	Hoover Rd (Pershing)	s side of carport	10
5488	117215	AAFES Shoppette	Hoover Rd, Pershing	northwest corner	100
5488adj	1118352	JK Richardson	Hoover Rd, Pershing	north side	1
51609-1	692816	DEH-Hsg (type gas)	Zuni Circle (Com 2)	by front door	100
51636-7	692814	DEH-Hsg (type gas)	Karankawa Cir (Com 2)	by front door	100
51733-2	692813	DEH-Hsg (type gas)	Karankawa Cir (Com 2)	by front door	100
51764-1	688020	DEH-Hsg (type gas)	Karankawa Cir (Com 2)	by front door	100
51452-1	692819	DEH-Hsg (type gas)	Coushatta St (Com 2)	by front door	100
51544-1	692818	DEH-Hsg (type gas)	Coushatta St (Com 2)	by front door	100
51550	692815	DEH-Hsg (type gas)	Coushatta St (Com 2)	center of duplex	100
51322adj	102042	DEH-Hsg (type gas)	Yuma Ct (Comanche 1)	west side	1
2241	516923	DPCA-Sunburst Inn	58th & Support Ave	west side	100
2319		AAFES Pastry Shop	56th and Bn Ave	north side	100
24007	147088	AAFES Snack Bar/MCC	58th and Bn Ave	east side	100
2804	3404948	DPCA-Bowlers Green	62nd and HQ Ave	southeast corner	100
2804	3404954	DPCA-Bowlers Green	62nd and HQ Ave	north side	100
3203	45499225	DPCA-Car Wash, Saber	72nd & HQ Ave	east side	100

BLDG. NO.	UID #	OWNER	ADDRESS	LOCATION	MULT
33003	212445	ICD Troop Med Clinic	Bn/75th	SW corner	1
4221	4113030	Post Laundry	78th and T-D Blvd	w side, turbine mtr	1000
4221	1120493	Post Laundry	78th and T-D Blvd	sw corner	1
49020	17509	AAFES Central Kitchen	80th and Santa Fe	se corner	1
50110	894527	AAFES Shoppette, CC	Clear Crk & Santa Fe	west side breezeway	1
50001	187190035	Commissary	Clear Crk & Cove Rd	w side, n of mech rm	100
50004	6585	AAFES PX, Main	Clear Creek	sw corner	1
52019adj	1374682	DPCA-Comanche Pool	Copperas Cove Rd	west side	100
70004	1684920	DPCA-WFH RV Park	Clark Rd	west side	100
70003		AAFES Gas Sta, WFH	Base Road, Montague	east side	100
70000	1684918	DPCA-Com Ctr Mont	Clark Rd		100
91026adj	1164861	JT Construction	Gray Drive/Station	north side	100
90053	403597	Wimsco, Inc	Gray Drive	e side of bldg	100

J2.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 7**. New secondary meters shall be installed IAW Paragraphs C.3.3.1, *Future Meters*, and C.13, *Operational Transition Plan*. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3.3, *Metering*, and J2.6 below.

TABLE 7
New Secondary Meters
Natural Gas Distribution System, Fort Hood, Texas

Housing Village	Meter Location	Pipe Size	Meter Description
Montague	Locate meter on main entering housing village	4 in.	Area Master Gas Meter
Comanche 3a	Locate meter on main entering housing village	4 in.	Area Master Gas Meter
Comanche III, B-1	Locate meter on main entering housing village	4 in.	Area Master Gas Meter
Comanche III, B-2	Locate meter on main entering housing village	4 in.	Area Master Gas Meter
Comanche I	Locate meter on main entering housing village	4 in.	Area Master Gas Meter
Comanche I	Locate meter on main exiting housing village	6 in.	Area Master Gas Meter

Housing Village	Meter Location	Pipe Size	Meter Description
Comanche II	Locate meter on main entering housing village	4 in.	Area Master Gas Meter
Venable	Locate meter on main entering housing village	8 in.	Area Master Gas Meter (Upstream side of village)
Pershing	Locate meter on main entering housing village	8 in.	Area Master Gas Meter (Downstream side of village)

J2.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW Paragraph G.2, *Submission and Payment of Invoices* and Paragraph J2.3.1, *Non-Government Installed Utilities Infrastructure*). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. The Contractor's monthly invoice shall include segregated costs IAW with each CLIN. Costs shall be segregated into two categories: costs associated with Housing areas and costs associated with non-Housing areas. The Contractor shall provide sufficient supporting documentation with each monthly invoice to substantiate all costs included in the invoice for each CLIN as approved by the Contracting officer. The proposed system of accounts shall be made available in electronic format as directed by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

   Name: DIRECTORATE OF PUBLIC WORKS
   ATTN (Barry Barnett- Contracting Command)
   III CORPS AND FORT HOOD
   Address: 4612 ENGINEER DRIVE, ROOM 76
   FORT HOOD, TEXAS 76544-5028
   Phone number: (254) 287-7671

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

   Name: DIRECTORATE OF PUBLIC WORKS
   ATTN (Bobby Lynn- DPW)
   III CORPS AND FORT HOOD
   Address: 77TH AND WAREHOUSE AVE., BLDG. 4219
   FORT HOOD, TEXAS 76544-5028
   Phone number: (254) 287- 7671

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month's readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted

by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Name:	DIRECTORATE OF PUBLIC WORKS ATTN (Bobby Lynn- DPW) III CORPS AND FORT HOOD
Address:	77TH AND WAREHOUSE AVE., BLDG. 4219 FORT HOOD, TEXAS 76544-5028
Phone number:	(254) 287-7671

J2.7 Energy Saving Projects

IAW Paragraph C.3.4, Energy and Water Efficiency and Conservation, the following projects have been implemented by the Government for conservation purposes.

- There are no energy savings projects associated with the utility system being privatized.

J2.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Fort Hood boundaries including the Main Cantonment area, North Fort Hood, and West Fort Hood. The North Fort Hood area is serviced by a separate distribution system from the Main and West Fort Hood areas.

J2.9 Off-Installation Sites

No off-installation sites are included in the privatization of the Fort Hood natural gas distribution system.

J2.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 8** provides a list of service connections and disconnections required upon transfer.

TABLE 8
Service Connections and Disconnections
Natural Gas Distribution System, Fort Hood, Texas

Location	Description
There are no service connections or disconnections required upon transfer of the Fort Hood Natural Gas Distribution System.	

J2.11 Government Recognized System Deficiencies

Table 9 provides a list of Government recognized deficiencies. The deficiencies listed may be physical deficiencies, functional deficiencies, or operational in nature. If the utility system is sold, the Government will not accomplish a remedy for the recognized deficiencies listed. The Offeror shall make a determination as to its actual need to accomplish and the timing of any and all such deficiency remedies.

Physical and functional deficiencies may require capital to be invested in the system. If any deficiency remedy requires a capital upgrade project, the capital upgrade project shall be proposed according to the following:

- Capital upgrade projects required to bring the system to standard shall be proposed under Schedule 3 – Initial Capital Upgrade(s)/Connection Charge(s).
- Capital upgrade projects required to replace system components shall be proposed in the first years of Schedule 2 – Renewals and Replacements – 50 Year Schedule, and the cost factored into Schedule 1 – Fixed Monthly Charge, for Renewals and Replacements as part of CLIN AA.
- Transition costs shall be proposed as a one-time cost and shall be treated similar to a capital project and included in Schedule 3 – Initial Capital Upgrade(s)/Connection Charge(s).
- Improvements proposed in the operational component of the work shall be included in Schedule 1 – Fixed Monthly Charge as part of CLIN AA.

TABLE 9
System Deficiencies
Natural Gas Distribution System, Fort Hood, Texas

System Component	Deficiency Description	Type of Project
Master Meter	The master meter for Kouma Village is defective. Existing diaphragm meter needs replaced with suitable turbine meter.	Renewals and Replacement
Distribution System Piping and Valves	Some valves and piping have exceeded their useful lives and should be replaced.	Renewals and Replacement
District Regulator Stations	Seven district regulator stations have neither pressure relief devices nor bypass lines. One district regulator station has a pressure relief device but no bypass line. Assess the need for pressure relief devices and bypass lines and make the necessary improvements to comply with applicable codes.	Capital Upgrade
PVC Piping in the Main Cantonment Area and North Fort Hood	The schedule 40 PVC piping in these areas frequently develops leaks, primarily at the joints, and should be replaced.	Renewal and Replacements
Cathodic Protection System	Maintenance of the cathodic protection system has been inadequate. The requirements for cathodic protection of existing steel piping and the condition of the existing cathodic protection system should be assessed and repairs and/or upgrades made as necessary to ensure compliance with 49CFR192.465.	Capital Upgrade

System Component	Deficiency Description	Type of Project
Operating Procedures	Operating procedures for the natural gas distribution system need to be reviewed and updated on an annual basis.	O&M
SCADA	The current SCADA has not been maintained and is currently inoperative.	Capital Upgrade
Regulator Station -02	Meter required to be installed for new SCADA system.	Capital Upgrade
Regulator Station -03	Meter required to be installed for new SCADA system.	Capital Upgrade
Regulator Station -10	Meter required to be installed for new SCADA system.	Capital Upgrade
Regulator Station -11	Meter required to be installed for new SCADA system.	Capital Upgrade